ABSTRACT OF THE DISCLOSURE

A data recording device comprises a block division unit dividing a sequence of user data blocks into first blocks and second blocks, a plurality of multi-level data generating units generating multi-level data blocks from the first blocks and the second block, a group data storage unit storing first and second groups of code data corresponding to one user data block, a plurality of averaging units each calculating an average of DC levels based on the multi-level data of one of the blocks, a level comparison unit comparing each of the DC level averages with a predetermined value; a revision data generating unit generating a revision data using a result of the comparison, a data selection unit selecting one of the first and second groups of code data, and an output storage unit storing the first blocks, the second blocks generated using the selected code data, and the revision data.